

10:00 am	10:05 am	10:00 am	10:00 am
Parts of a	Parts of a	Parts of a	Parts of a
woodland system:	woodland system:	woodland system:	woodland system:
lizards	air	crickets	blueberries
snails	water	isopods	oak trees
toads 1.	light 2.	earthworms 3.	wildflowers 4.

1. Which notebook entry lists non-living parts of a woodland ecosystem?

- A. 1
 - B. 2
 - C. 3
 - D. 4
-

2. Which of these is a saltwater ecosystem?

- A. Atlantic Ocean
 - B. Falls Lake
 - C. Crabtree Creek
 - D. Neuse River
-

3. The science museum has a big, salt water touch tank. Visitors can reach in and hold sea stars in their hands. Which best describes this tank?

- A. It's a large ecosystem
 - B. It's a woodland ecosystem
 - C. It's a model ecosystem
 - D. It's a toy ecosystem
-

4. Which of these organisms make their own food?

- A. Caterpillars and butterflies
 - B. Isopods and crickets
 - C. Plants and algae
 - D. Pond snails and fish
-

5. Which of these is needed for algae and aquatic plants to live in pond water?

- A. Cold temperature
- B. Shaded rocks
- C. Small fish
- D. Sunlight

6. Pond water is a slow moving aquatic environment. Which of these is a fast moving aquatic environment?

- A. 50 gallon aquarium
 - B. Meandering river
 - C. Mountain stream
 - D. Tidal pool
-

7. Frank and Marty are setting up an aquarium. Why are they careful not to add too many duckweed plants?

- A. Duckweed attracts small insects
 - B. Duckweed is so small it is fine to add more
 - C. Too many of one organism can crowd the system
 - D. Too much duckweed turns the water green
-

8. Angie is exploring tidal pools, collecting shells and digging in the sand. Which ecosystem is Angie exploring?

- A. Desert
 - B. Ocean
 - C. Pond
 - D. Riverbank
-

9. Abbie and Dan are testing soil pH. Which of these is the best way to begin testing pH levels in the soil?

- A. Place pH paper in the sun on top of the soil
 - B. Plant pH paper with the seeds
 - C. Press pH paper into the soil until it gets wet
 - D. Tape pH paper to the outside of a terrarium
-

10. A student planted mustard, alfalfa and grass seed in a soda bottle aquarium. They plant the seeds 6 days before adding the animals. Why?

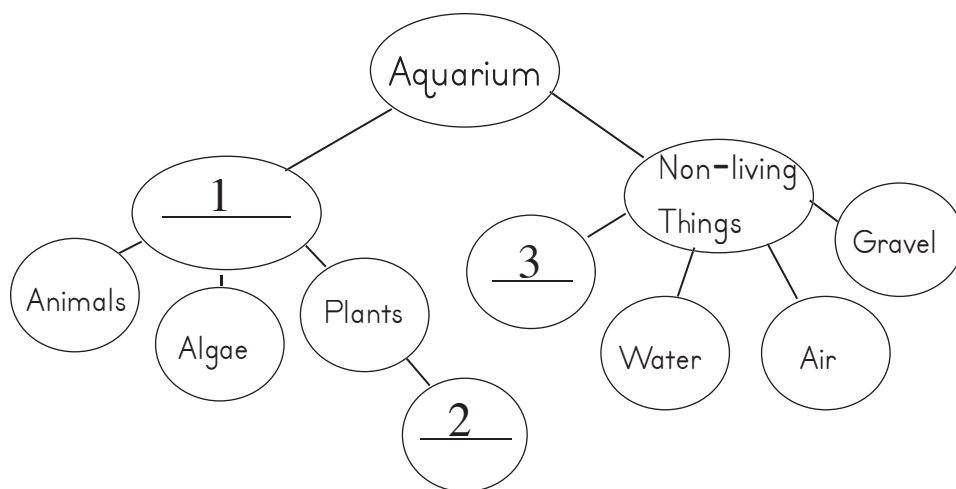
- A. Animals are very active
- B. Animals need more space
- C. Seeds need light and water
- D. Seeds will grow to feed the animals

11. Producers are an important part of an ecosystem. What is special about producers?

- A. They are the “clean up” crew in the system
 - B. They are at the top of the food chain
 - C. They eat small animals in the system
 - D. They make their own food and oxygen
-

12. Which organisms recycle decaying plants and animals into something useful?

- A. Consumers
 - B. Decomposers
 - C. Producers
 - D. Scavengers
-



Use the graphic organizer above to answer questions number 13, 14 and 15.

13. Which is the best choice for circle 1?

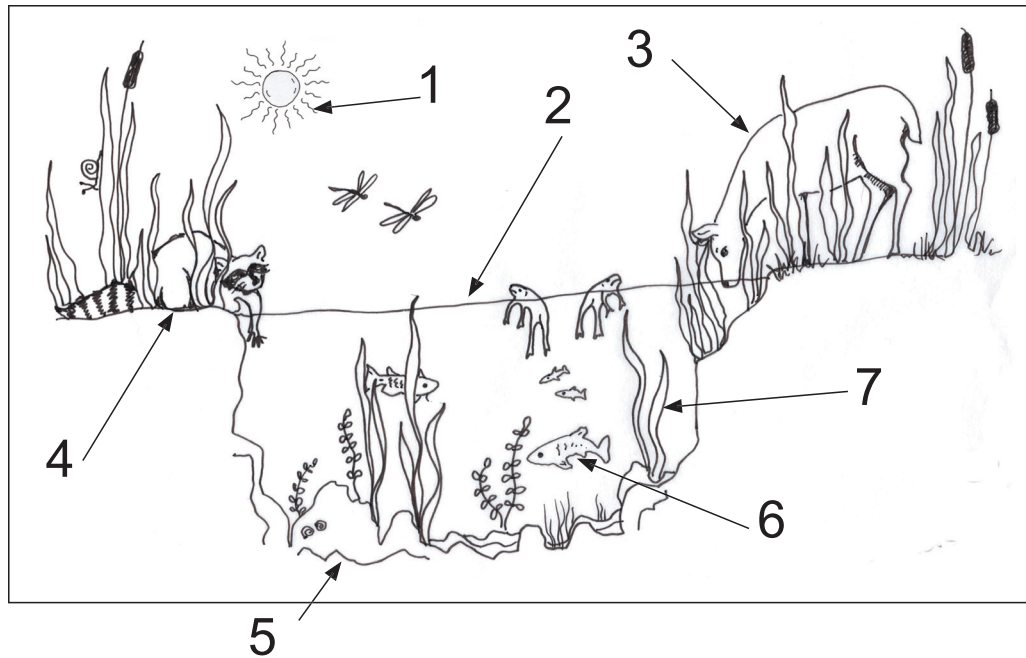
- A. Ecosystem
- B. Habitat
- C. Model
- D. Organisms

14. Which is the best choice for circle 2?

- A. Alfalfa
- B. Elodea
- C. Mustard
- D. Wheat

15. Which is the best choice for circle 3?

- A. Fish
- B. Snails
- C. Soil
- D. Sunlight



Use the drawing above to answer questions 16, 17 and 18.

16. Which of these are a source of energy for the raccoon?

- A. 2
- B. 3
- C. 5
- D. 6

17. Which of these are the only organisms in the system that can use non-living matter to make food?

- A. 3
- B. 4
- C. 6
- D. 7

18. Which of these is the primary energy source for the system?

- A. 1
- B. 2
- C. 3
- D. 5

9:30 AM	8:05 AM	10:15 AM	10:15 AM
The water temperature is 69° F. The water is getting warmer. I think plants like warm water.	Part of a leaf is missing. I see 2 other leaves with parts missing	The elodea is floating near the top of the water.	Two fish are swimming close to the pebbles.
	The fish seem to jump at the plants.	Duckweed floats on top of the water.	Plants float on top of the water.
1.	2.	3.	4.

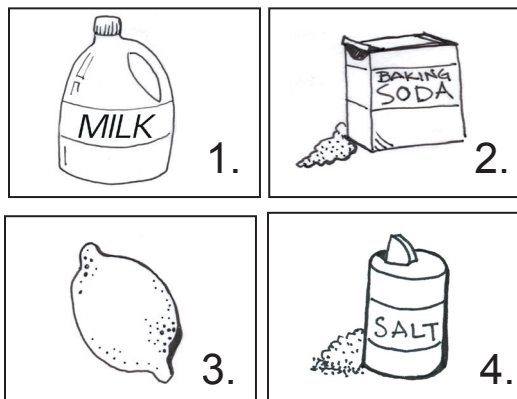
19. Two students are recording observations of a soda bottle aquarium. Which notebook entry contains evidence that animals may be eating the plants?

- A. 1
- B. 2
- C. 3
- D. 4

20. How can the students be sure animals are eating the plants?

- A. Add fish food to the system
- B. Take plants out of the system
- C. Observe the organisms closely and record what happens
- D. Remove half the fish and snails

21. Jose is testing the effects of acid rain. Which of these did she add to water to make a test solution?



- A. 1
- B. 2
- C. 3
- D. 4

22. Amy and Andrew are investigating acid rain on plants. They set up two terrariums and use a vinegar solution as the pollutant. Vinegar solution is added to one terrarium but not the other. What is the variable in this experiment?

- A. Different science notebook entries
- B. The terrarium without vinegar
- C. The use of a vinegar solution
- D. Two students working on one question

23. A 5th grade class built 6 terrariums to use with pollution experiments. All terrariums are the same and are labeled A - F. Terrarium F was not polluted during the experiments. How can F be described?

- A. F is the control
 - B. F is the variable
 - C. F is the pollutant
 - D. F is experimental
-

24. Which of these is an environmental problem?

- A. Bicycles are not allowed on the sidewalk
 - B. Rock salt on snow covered roads
 - C. The main traffic light is broken
 - D. The gas station is out of road maps
-

25. A student planted mustard, alfalfa and grass seed in a soda bottle terrarium. Five days later the grass measured 2 cm tall. Which of these is a prediction?

- A. On day 5, the alfalfa is the shortest plant
 - B. The mustard plants are crowded
 - C. The grass measures 2 cm tall
 - D. The grass will be the tallest plant on day 8
-

26. Maria is measuring whether a solution is acidic, basic or neutral. What unit of measure is she using?

- A. grams
 - B. ml
 - C. Mohs'
 - D. pH
-

27. Chelsey is closely observing the soda bottle aquarium. Where is the oxygen coming from in this aquatic system?

- A. The swimming fish
 - B. The green plants
 - C. The loose pebbles
 - D. Evaporating water
-

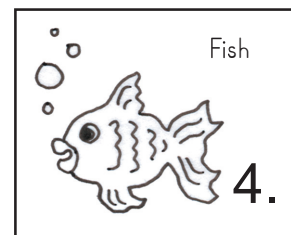
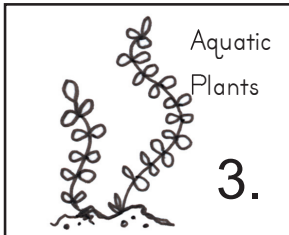
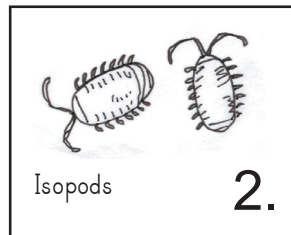
28. Ava and Mike used a plastic dropper to gently bubble air into their soda bottle aquarium. Why did they do that?

- A. To add oxygen to the water
- B. To capture baby snails
- C. To clean the water
- D. To move fish to the net

29. Nature recycles decaying plants and animals. How does this help the soil in an ecosystem?

1. It puts nutrients into the soil
2. It removes pollutants
3. The soil dries out more quickly
4. The soil contains less air and water

30. Which organisms are scavengers?



- A. 1, 2
B. 2, 3
C. 3, 4
D. 4, 1